



City of Thousand Oaks

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January 20, 2011

SENT VIA E-MAIL

Theresa Aguilar Finger, Special Projects Manager, MBA/TM, C.P.A.
Secretary of State
1500 11th Street, 6th Floor
Sacramento, CA 95814

RE: Proposed Trustworthy Electronic or Record Preservation

Dear Ms. Aguilar Finger:

This letter is in response to the notice of Proposed Rulemaking for Trustworthy Electronic Document or Record Preservation. We have reviewed the recommendations taken from section 5.4.1.4 of "AIIM ARP1-2009" on image formats, and we find them seriously flawed.

AIIM's suggestion that "the TIFF format be utilized with caution," and that organizations should instead adopt PDF-A as their archival standard, sends the wrong message to technology users and developers in California and the world. Presently there are thousands of state and local government organizations that have selected TIFF as a proven archival standard because it is robust and non-proprietary. In fact, technology providers such as Laserfiche (we are an end user of Laserfiche) build their software on an open architecture to ensure that system performance is continuously enhanced by advances in hardware, software and communication technologies. Constricting them to use of a proprietary format such as PDF-A stifles software development and inhibits the industry's ability to respond to customer needs.

We have archived documents in the TIFF file format for more than 10 years, and we continue to have ready access to those images today. Choosing a format such as PDF-A, which is controlled by a single vendor, runs contrary to the principles of long-term preservation and archiving because there is no guarantee that the format will be supported in the years to come.

Further, the assertion that the use of TIFF requires wrappers or headers is incorrect. Although TIFF allows the use of wrappers or headers, it is certainly not standard, nor is it a recommended practice. Laserfiche has been developing enterprise content management (ECM) software which allows us to recommend and assert that:

- Images should be stored in TIFF standard compression format to ensure long-term accessibility.



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- Best practice does NOT allow storage of metadata in the TIFF header through the use of proprietary tags or wrappers.
- TIFF images should be stored securely as read-only on the file system so that they are unalterable.
- TIFF images should be encrypted so that unauthorized access is mitigated.

While standards for long-term preservation of information are critical, they should not hinder innovation. Cautioning against TIFF would directly limit innovation without bringing benefits to state and local entities. It is widely known in the programming community that few software development toolsets are available for PDF, whereas there is a vast array of toolsets available for TIFF. Additionally, the increasingly mobile nature of today's workforce requires us to deliver information in the most device-centric manner possible. TIFFs, which can be rendered as PNG files "on the fly," are both browser- and network-bandwidth friendly.

Adopting the proposed recommendation would put California ECM users and developers at a severe technological disadvantage.

Therefore, we strongly recommend that the Secretary of State **not** adopt the proposed recommendations.

Sincerely,



Linda Lawrence, MMC
City Clerk

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